REMARKS

Claims 1-252 have been canceled and new claims 253-284 have been added.

The amendments to the specification update the status of related applications and corrects minor informalities noted during review. No new matter is added by the amendments to the specification.

Another version of these paragraphs, marked to show the changes made and employing underlining to show additions and brackets to identify deletions, and including numbered paragraphs (i)-(vi) to illustrate correspondence with the clean versions of these paragraphs, is attached on separate pages from this amendment, in accordance the provisions of 37 CFR §1.121(b)(1)(i)-(iii).

New claims 253-284 are supported by text appearing at p. 83, line 5 through p. 279, line 3 of the specification as originally filed.

New claims 253-284 are also supported by p. 193, line 9 et seq. and associated Figs. of the specification as originally filed.

New claims 253-284 are also supported by p. 175, line 8 through p. 217, line 24, and in Figs. 8.0504, 8.050401, 8.050401AA-CK, 8.050402, 8.050402AA-CJ, 8.050403, 8.050403AA-BI, 8.050405 and 8.050405AA-EJ of the specification as originally filed.

No new matter is added by new claims 253-284. New claims 253-284 distinguish over the art of record and are allowable.

This application is believed to be in condition for allowance and action to that end is requested. The Examiner is requested to telephone the undersigned in the event that the next office action is one other than a Notice

of Allowance. The undersigned is available during normal business hours (Pacific Time Zone).

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page(s) are captioned "**<u>Version with markings to show changes made.</u>**"

Respectfully submitted,

Dated: March 30, 2001 By: ______________________
Frederick M. Fliegel, Ph.D.
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

AMENDMENTS

(i) This application is a continuation of U.S. Patent Application Serial No. 09/161,512, filed on September 28, 1998, which is a divisional of U.S. Application Serial No. 08/705,043, filed on August 29, 1996, now U.S. Patent No. 6,130,602 (incorporated herein by reference), which claims priority from U.S. Provisional Application 60/017,900, filed May 13, 1996, titled "Radio Frequency Data Communication Device."

(ii) Another aspect of the invention provides a method for conserving power in a radio frequency identification device, the method comprising periodically switching from a sleep mode to a receiver on mode and performing the following tests to determine whether to further switch to a microprocessor on mode because a valid radio frequency signal is present: (a) determining if any radio frequency signal is present and, if so, proceeding to step (b); and, if not, returning to the sleep mode; (b) determining if the radio frequency signal is modulated and has a predetermined number of transitions per a predetermined period of time and, if so, proceeding to step (c); and, if not, returning to the sleep mode; and [©] (c) determining if the modulated radio frequency signal has a predetermined number of transitions per a predetermined period of time different from the predetermined time of step (b) and, if so, switching to the microprocessor on mode; and, if not, returning to the sleep mode.

(iii) If the power source 18 is a battery, the battery can take any suitable form. Preferably, the battery type will be selected depending on weight, size, and life requirements for a particular application. In one embodiment, the battery 18 is a thin profile button-type cell forming a small, thin energy cell more commonly utilized in watches and small electronic devices requiring a thin profile. A conventional button-type cell has a pair of electrodes, an anode formed by one face and a cathode formed by an opposite face. Exemplary button-type cells are disclosed in several pending U.S. patent applications including U.S. Patent Application Serial No. 08/205,957, "Button-Type Battery Having Bendable Construction and Angled Button-Type Battery," listing Mark E. Tuttle and Peter M. Blonsky as inventors, now U.S. Patent No. 5,432,027; U.S. Patent Application Serial No. 08/321,251, "Button-Type Batteries and Method of Forming Button-Type Batteries," listing Mark E. Tuttle as inventor, now U.S. Patent No. 5,494,495; and U.S. Patent Application Serial No. 08/348,543, "Method of Forming Button-Type Batteries and a Button-Type Battery Insulating and Sealing Gasket," listing Mark E. Tuttle as inventor, now U.S. Patent No. 5,662,718. These patent applications and resulting patents are hereby incorporated by reference. In an alternative embodiment, the battery 18 comprises a series connected pair of button type cells. Instead of using a battery, any suitable power source can be employed.

(iv) Various U.S. patent applications, which are incorporated herein by reference, disclose features that are employed in various alternative embodiments of the invention: 08/092,147, filed July 15, 1993, "Wake Up Device for a Communications System", now abandoned, and continuation application 08/424,827, filed April 19, 1995, "Wake Up Device for a Communications System", now U.S. Patent No. 5,790,946; 08/281,384, filed July 27, 1994, "Communication System Having Transmitter Frequency Control", now U.S. Patent No. 5,568,512; 07/990,918, filed December 15, 1992, now U.S. Patent No. 5,365,551, "Data Communication Transceiver Using Identification Protocol"; 07/899,777, filed June 17, 1992, "Radio Frequency Identification Device (RFID) and Method of Manufacture, Including an Electrical Operating System and Method," now abandoned; 07/921,037, filed July 24, 1992, "Anti-Theft Method for Detecting The Unauthorized Opening of Containers and Baggage," now abandoned; 07/928,899, filed August 12, 1992, "Electrically Powered Postage Stamp or Mailing or Shipping Label Operative with Radio Frequency (RF) Communications," now abandoned; and 08/032,384, filed on March 17, 1993, "Modulated Spread Spectrum in RF Identification Systems Method," [now allowed] now U.S. Patent No. 5,539,775.

(v) Preferably, the above technique for mounting integrated circuit 16 to card 20 (of Fig. 4) consists of a flip-chip mounting technique. One example of a flip-chip mounting technique is disclosed in pending U.S. Patent Application Serial No. 08/166,747, "Process of Manufacturing an Electrical

Bonding Interconnect Having a Metal Bond Pad Portion and Having a Conductive Epoxy Portion Comprising an Oxide Reducing Agent," listing Rick Lake and Mark E. Tuttle as inventors, now U.S. Patent No. 5,480,834 and incorporated herein by reference.

(vi) The multiplier cell originally developed by Gilbert employed bipolar junction transistors. It is also known to employ MOS transistors to produce a Gilbert multiplier cell. See, for example, *Analog Integrated Circuits for Communication, Principles, Simulation and Design*, Donald O. Pederson and Kartikeya Mayaram, [Kuwer] Kluwer Academic Publishers, Third Printing, 1994, pp. 431-433.